In the Claims:

Please cancel claims 2, 8-13, 15, 20-22, 24, 29 and 33-34 without prejudice to the inclusion of the subject matter contained therein in any later filed continuation or divisional application(s). Claims 25-28, 30-32 and 35-37 have been previously canceled.

Please amend claims 1, 3, 14, 17, 19, 23 as follows:

1. (Currently Amended) An expression vector which comprises an expression region, wherein the expression region comprises:

a promoter;

an intracellular retention signal sequence encoding region; and a

chemokine encoding region, wherein said chemokine is selected from the group consisting of a RANTES (Regulated upon Activation, Normal T cell Expressed, and presumably Secreted), a MIP-1α (Macrophage Inflammatory Protein-1α), a MIP-1β and a SDF-1 (stromal cell derived factor-1).

wherein said intracellular retention signal sequence and said chemokine encoding region are expressed from said promoter as a single intrakine transcript; and wherein said expression vector is administered to a lymphocyte, a monocyte, a macrophage or a stem cell; and further wherein said lymphocyte, monocyte, macrophage or stem cell is transduced *ex vivo* with said expression vector.

2. (Canceled)

3. (Currently Amended) The expression vector of claim 1[[2]], wherein said coding region encoding said ~~secreted~~ chemokine is expressed from an internal ribosome entry site.

4. (Original) The expression vector of claim 1, further defined as a retroviral vector.

5. (Original) The expression vector of claim 1, wherein said intracellular retention signal sequence is an endoplasmic reticulum retention signal sequence.

6. (Previously Presented) The expression vector of claim 5, wherein said endoplasmic reticulum retention signal sequence is a KDEL sequence (SEQ ID NO: 7).

7. (Previously Presented) The expression vector of claim 6, wherein said KDEL sequence (SEQ ID NO: 7) has the amino acid sequence SEKDEL, SEQ ID NO:6.

Claims 8-13 (Canceled)

14. (Currently Amended) The expression vector of claim 1 [[2]], wherein said ~~secreted~~ chemokine binds to a chemokine receptor, further wherein one or more amino acids are deleted from the N-terminus of said chemokine.

Claim 15 (Canceled)

16. (Previously presented) The expression vector of claim 1, wherein said intracellular retention signal sequence directs a protein expressed from said single intrakine transcript to the endoplasmic reticulum, Golgi apparatus, a lysosome, an intracellular vesicle or other cellular compartment.

17. (Currently Amended) An *ex vivo* method of inhibiting phenotypic expression of a chemokine receptor in a cell, wherein the method comprises blocking cell surface expression of said chemokine receptor by binding of said chemokine receptor with an intrakine, wherein said chemokine receptor is selected from the group consisting of a C-C chemokine 5 receptor, a C-C chemokine 3 receptor, a C-C chemokine 1 receptor and a CXR4 receptor.

18. (Previously Presented) The method of claim 17, further defined as comprising the steps of:

obtaining a vector comprising a nucleic acid segment encoding a promoter; an intracellular retention signal sequence and a chemokine receptor binding polypeptide coding region; and

transducing said vector into said cell;

wherein said vector expresses said intracellular retention signal sequence and chemokine receptor binding polypeptide coding region under the transcriptional control of said promoter to produce a fusion polypeptide when transduced into said cell.

19. (Currently Amended) The method of claim 18, wherein said polypeptide is selected from the group consisting of ~~a chemokine, the chemokine analog~~ a RANTES, a MIP-lα, a MIP-lβ, a SDF, an HIV gp 120, an HIV gp 120 and RANTES(9-68)~~, an antibody or a peptide~~.

Claims 20-22 (Canceled)

23. (Currently Amended) An *ex vivo* method of inhibiting HIV infection of a cell, said method comprising phenotypically knocking out an HIV co-receptor in said cell by binding of said HIV co-receptor with an intrakine, wherein said phenotypic knock-out of said HIV co-receptor in said cell inhibits infection of said cell, wherein said co-receptor is selected from the group consisting of a C-C chemokine 5 receptor, a C-C chemokine 3 receptor, a C-C chemokine 1 receptor and a CXR4 receptor.

Claim 24-37 (Canceled)

38. (Previously Presented) A composition comprising the expression vector of claim 1 and a pharmaceutically acceptable solution.

39. (Previously Presented) A method of increasing white blood cell count in a subject with an HIV infection comprising administering to said subject a pharmaceutical composition comprising a lymphocyte, a monocyte, a macrophage or a stem cell transduced *ex vivo* with the vector of claim 1, thereby increasing white blood cell count in said subject with an HIV infection